

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

5 Listing of Claims:

Claims 1-12 (cancelled)

Claim 13 (currently amended): A method for generating a linked list corresponding to a memory in an electronic device, comprising:

- 10 (a) forming a linked list for the memory, wherein each entry of the linked list corresponds to a portion of the memory;
- (b) performing a built-in self test (BIST) on the memory to identify a first defective portion of the memory; and
- 15 (c) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory before the memory is completely examined by the BIST.

- 20 Claim 14 (previously presented): The method of claim 13, wherein the memory being tested in step (b) is used for storing the linked list, and step (c) comprises:
- excluding the use of the defective portion of the memory in storing the linked list.

- 25 Claim 15 (previously presented): The method of claim 13, wherein the memory being tested in step (b) is a packet buffer for data storage.

Claim 16 (cancelled)

- 30 Claim 17 (currently amended): The method of claim ~~[[16]]~~13, further comprising:

- (d) after performing step (c) of updating, continuing the BIST in
step (b) to identify a second defective portion of the memory;
and
(e) updating the linked list to remove from the linked list the entry
of the linked list corresponding to the identified second
defective portion of the memory.

Claim 18 (previously presented): The method of claim 17, wherein the
electronic device comprising the memory is a network switch.

Claim 19 (currently amended): A method for generating a linked list
corresponding to a memory in an electronic device, comprising:
forming a linked list for the memory, wherein the linked list
comprises a plurality of entries each having a first pointer
field and a second pointer field, the first pointer field for
storing a pointer to a corresponding portion of the memory and
the second pointer field for storing a pointer to another entry
of the linked list;
performing a built-in self test (BIST) on the memory to identify at
least one defective portion of the memory; and
updating the linked list to remove from the linked list the entry of
the linked list corresponding to the identified defective portion
of the memory, so that none of the entries of the updated
linked list comprises a pointer in the second pointer field that
points to the entry corresponding to the identified defective
portion;
wherein the step of updating the linked list is performed before the
memory is completely examined by the BIST.

Claim 20 (previously presented): The method of claim 19, wherein the
electronic device comprising the memory is a network switch.

Claim 21 (previously presented): The method of claim 19, wherein the memory being tested in the BIST step is a packet buffer for data storage.

- 5 Claim 22 (previously presented): A method for generating a linked list corresponding to a memory, comprising:
- (a) forming a linked list for the memory, wherein the linked list comprises a plurality of entries each having a first pointer field and a second pointer field, the first pointer field for
10 storing a pointer to a corresponding portion of the memory and the second pointer field for storing a pointer to another entry of the linked list;
 - (b) performing a built-in self test (BIST) on the memory to identify a first defective portion of the memory;
 - 15 (c) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory;
 - (d) after step (c) is completed, continuing the BIST to identify a second defective portion of the memory; and
 - 20 (e) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified second defective portion of the memory.

25 Claim 23 (new): The method of claim 22, wherein the memory is a packet buffer for data storage.

Claim 24 (new): The method of claim 22, wherein step (b) comprises:
pausing the BIST when the first defective portion of the memory is
30 identified.

Claim 25 (new): A method for generating a linked list corresponding to a memory, comprising:

forming a linked list for the memory, wherein the linked list
comprises a plurality of entries each having a first pointer
field and a second pointer field, the first pointer field for
storing a pointer to a corresponding portion of the memory and
5 the second pointer field for storing a pointer to another entry
of the linked list;

performing a built-in self test (BIST) on the memory; and
each time a defective portion is found in the memory by the BIST,
pausing the BIST, updating the linked list to remove an entry
10 corresponding to the defective portion of the memory from the
linked list, and then continuing the BIST on remaining
portions of the memory.

Claim 26 (new): The method of claim 25, wherein the memory is a
15 packet buffer for data storage.